have the vascular bundles lying in the cambium-cylinder separated by very broad medullary rays. If we trace, for instance, the development of the stem of an *Impatiens*, we see that the cells of the medullary rays produced by the development of the cambiumring become converted more and more into prosenchymatous cells, and that between them appear groups of vessels (but without spiral vessels), thus giving origin to new vascular bundles. Hartig* observed vascular bundles developed in the abovedescribed secondary cambium-layer which appears in the medulla of *Cucurbita*.

XLI.—On Additions to the Madeiran Coleoptera. By T. VERNON WOLLASTON, M.A., F.L.S.

Fam. Carabidæ.

Genus Olisthopus, Dej.

Olisthopus humerosus, n. sp.

Olisthopus maderensis, var. β , Woll. Ins. Mad. 35 (1854). ----- humerosus, Schaum, in litt.

It is not without some little hesitation that I am induced to register the present insect as specifically distinct from the O. maderensis, of which I have hitherto regarded it as an insular modification (although certainly a very curious one) peculiar to the rocks of the Dezertas. And I may add that it is through the strongly expressed opinion of my friend Dr. Schaum of Berlin, who has stated his belief that the peculiarities which it exhibits are too great to be attributed to any combination of the local influences to which it may have been long exposed, that I now record it under the new trivial name which he has suggested, —a title indicative of a character about its shoulders, which are a trifle more produced (and angular) than those of the O. maderensis. The other points in which it recedes from its ally may be at once gathered by a reference to the 'Insecta Maderensia.'

Genus STENOLOPHUS, Meg.

Stenolophus marginatus.

Stenolophus marginatus, Dej. Spéc. gén. des Col. iv. 427 (1829).

Two Madeiran specimens of this insect have lately come under my notice; they were both captured near Funchal, one by Mr. M. Park, and the other by Mr. E. Leacock. The species

* Bot. Zeitung, 1854, p. 31.

may be at once known from the S. Teutonus by (inter alia) its rather smaller size and totally different hue, its upper surface being of a dull metallic green—except the suture and the extreme margins of the elytra and prothorax, which are paler. It has been recorded as occurring in Spain, the south of France, Corfu, Greece, and Egypt; and I have myself taken it in the island of Grand Canary.

Fam. Lathridiadæ.

Genus Corticaria, Mshm.

Corticaria maculosa, n. sp.

C. elongato-ovata, fulvo-ferruginea, pubescens; capite prothoraceque profunde punctatis, hoc ad latera crenulato, fovea postmedia minus profunda impresso; elytris substriato-punctatis, macula nigra postmedia plus minus distincta in singulo ornatis; antennis apicem versus obscurioribus.

Long. corp. lin. $1-1\frac{1}{8}$.

C. elongate-ovate, pale fulvo- or rufo-ferruginous, pubescent, and slightly shining. *Head* and *prothorax* beset with large but not very close punctures; the *latter* with the edges rather distinctly crenulated behind, and with the post-medial fovea round and distinct, but not very deep. *Elytra* substriatepunctate, and with a more or less apparent black patch on the hinder disk of each, and occasionally with a very obscure cloud towards the base of each, a little behind the scutellum. *Antennæ* rather dusky towards their apex.

N.B. In some specimens (especially immature ones) the elytral patches are entirely obsolete, under which circumstances the insect is wholly ferruginous.

Five specimens of the present Corticaria were captured by myself in Madeira proper during the summer of 1855; but, as they happened to be somewhat immature (and with the spots therefore but faintly expressed), I had confounded them with the C. fulva, of which I imagined them to be examples in which the pubescence was rather less developed than usual. Having, however, lately detected a mature and highly coloured one in the collection of Mr. M. Park, I at once recognized it as identical with a species which I have been recently taking in the Canarian Group; and this naturally led me to re-examine my supposed individuals of fulva, amongst which I then readily perceived the five above-mentioned specimens of what I now characterize as a new and very interesting species. It is the only Corticaria that I have yet seen in which there is any indication of distinct patches of colouring; but whether it may be identical with the C. macularis, Fuss, of the European Catalogues (as the name

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might lead us to suspect), I have no means of ascertaining. Mr. Park's example was captured crawling on the outside of a house in Funchal; and my own were taken partly in the garden of the Quinta da Favilla (also near Funchal), and partly at Camacha. In the Canaries the species is by no means uncommon; and I have it from, I believe, *five* (out of the seven) islands of the group. At first sight it very much resembles the *C. fulva*, Mann.; but the prothoracic fovea is not quite so deep, and the elytra are a trifle less ovate, with their pubescence shorter, and with a more or less conspicuous black patch on the hinder disk of each. Sometimes, however, this patch is entirely obsolete; and occasionally, in highly coloured specimens, there is a very obscure indication of an additional dark cloud (or transverse dash) towards the base of each, adjoining the suture, a little behind the scutellum.

Genus LATHRIDIUS, Hbst.

Lathridius delectus, n. sp.

L. elongatus, angustus, ferrugineus; capite prothoraceque profunde rugoso-punctatis, illo sat magno subquadrato, hoc subquadrato basi leviter angustato; elytris parallelis, profunde seriatim punctatis (punctis magnis), sutura interstitiisque alternis fortiter elevatis. Long. corp. lin. $\frac{3}{4}$.

L. elongate, narrow, nearly opake, and reddish ferruginous. Head and prothorax deeply and roughly punctured; the former rather large and subquadrate, being a little narrowed anteriorly, and about as wide behind as the front of the prothorax, which is also subquadrate, and rather narrowed posteriorly. Elytra with the sides parallel, closely and regularly seriate-punctate (the punctures being extremely large), and with the suture and alternate interstices greatly elevated, forming longitudinal costæ. Limbs concolorous.

The discovery of the present little Lathridius (which differs from all the European species which I have been able to examine) is due to Mr. M. Park, who captured a single specimen (which he has since presented to the Collection of the British Museum) near Funchal. It is of about the size and general aspect of the *L. filiformis*, Gyll., though its deep sculpture and greatly raised elytral costæ will at once distinguish it from that insect.

Fam. Cissidæ.

Genus RHYZOPERTHA, Steph.

Rhyzopertha bifoveolata, n. sp.

R. breviter cylindrica, piceo-ferruginea, subopaca ; prothorace magno,

subgloboso, valde convexo, scabroso, necnon antice mucronibus fortiter asperato, ad basin foveolis duabus mediis impresso; elytris ubique confertim punctatis (haud striatis), ad apicem integris; antennis longiusculis, robustis.

Long. corp. lin. vix $1\frac{2}{3}$.

R. rather larger and broader than the common R. pusilla, but proportionably not quite so long; a little darker (or more piceous), and nearly opake. Prothorax much larger and more globose than in that insect, being exceedingly convex, wider and more roughened in front, and with two deep, rounded foveæ or depressions (separated only by a narrow, rudimentary dorsal line) in the centre behind. Elytra uniformly and closely punctured all over, the punctures being much smaller and more numerous than those of the R. pusilla, and without any tendency to be arranged either in striæ or longitudinal rows; rounded and entire at the apex, where there is no appearance of an oblique truncation. Antennæ a little paler than the rest of the surface, and rather longer and more robust than in the R. pusilla.

The eight specimens from which the above description has been compiled were taken by Mr. M. Park in Funchal, and, as he believes, in company with the *Adelina farinaria*, in a cask of American(?) flour which had remained upwards of a year in the Custom-House, and had become bad. Hence, like the *Adelina*, it is evident that the present beetle cannot be strictly regarded as Madeiran; nevertheless, since by such modes of importation species become gradually naturalized, it seems desirable that all introductions should at any rate be admitted into our Catalogue, as serving to point out at what period their importation first took place. In the present instance, however, it appears highly probable that neither of the insects alluded to has as yet been described; which, if it be true, affords an additional reason for now characterizing them.

Fam. Curculionidæ.

Genus RHYNCOLUS, Germ.

Rhyncolus capitulum, n. sp.

R. angustus, cylindricus, nigro-piceus; prothorace profunde punctato (punctis magnis); elytris profunde punctato-striatis; antennis bre-

vibus, rufo-piceis, capitulo parvo, subgloboso.

Long. corp. lin. $1\frac{3}{4}$.

R. narrow and cylindrical (being of almost equal breadth throughout), dark piceous, and but very slightly shining. Rostrum short, broad, and very rugosely punctured; without any central keel, but with a very short, small, and obscure foveolet in the centre, between the insertion of the antennæ. Prothorax very deeply punctured (the punctures being large, and not nearly so numerous as in the *R. tenax*), and without any indication of a central keel; ovate, but truncated behind, being broadest just before the extreme base. Elytra very deeply punctate-striated (the punctures being large), and with the interstices most minutely punctulated. Legs concolorous with (or perhaps a little darker than) the rest of the surface. Antennæ paler (being bright rufo-piceous), and short, with their club much smaller and more globose than that of the *R. tenax*.

The single specimen from which the above description has been compiled was taken near Funchal by Mr. M. Park. Its comparatively narrow and very cylindric outline and deeply sculptured surface, in conjunction with its darker and unmetallic hue, its unkceled rostrum, and its shorter antennæ (which have their club much smaller and more globose than is the case in that species), will at once distinguish it from its only Madeiran ally, the *R. tenax*.

Fam. Cerambycidæ.

Genus Obrium, Meg.

Obrium brunneum.

Saperda brunnea, Fab. Ent. Syst. i. ii. 316 (1792). Obrium minutum, Steph. Ill. Brit. Ent. iv. 250 (1831). —— brunneum, Muls. Longic. de France, 99 (1840). —— , Redt. Fna Austr. 490 (1849).

A solitary example of the common little O. brunneum of Europe was captured lately by Mr. M. Park near Funchal. It is an insect widely distributed, being especially attached to all kinds of wicker- and basket-work, on the dry wood and sticks of which it feeds; so that it is peculiarly liable to accidental importation. I have taken it abundantly in the island of Palma, of the Canaries, emerging from its perforations on the sides of the light open trays in which silkworms are fed.

Fam. Erotylidæ.

Genus Euxestus, nov. gen.

Corpus parvum, oblongo-ellipticum, glaberrimum, politum, Olibri formam simulans sed ab eo affinitate longe distans : prothorace transverso, postice lato subsinuato elytris arcte applicato; prosterno inter pedes anticos late longitudinaliter elevato, lobum subtriangularem antice evanescentem efficiente : mesosterno angustissimo; scutello parvo, scutiformi : metasterno maximo, antice et postice integro, truncato; alis amplis, hinc inde parce nebulosis, fere nervulis carentibus : abdomine e segmentis 5 composito. Antennæ capitatæ,

capitis prothoracisque vix longitudine, articulo 1^{mo} robustissimo valde inflato subgloboso, 2do minore, 3tio huic graciliore sed elongato (forsan duorum inter se arcte conjunctorum composito), 4 sequentibus (i. e. usque ad capitulum) latitudine leviter crescentibus, capitulo magno solidissimo subgloboso ex articulis duobus vel tribus (1^{mo} multo majore) inter se arcte compressis formato. Labrum transversum, antice vix emarginatum submembranaceum ciliatum. Mandibulæ triangulares corneæ, ad apicem incurvæ latiusculæ tridentatæ, margine interno arcuato-emarginato et membrana robusta aucto. Muxillæ bilobæ, lobis angustulis subrectis; interno externo paulo breviore, intus ciliato. Palpi subfusiformes : maxillares art. 1mo parvo, 2do 3^{tio}que (illo præcipue) majoribus crassioribus, ultimo elongato fusiformi basi truncato: labiales art. 1mº parvo, 2dº magno crassiore, ultimo huic vix angustiore fusiformi basi truncato. Mentum corneum transversum, antice paulo angustatum et leviter emarginatum. Ligula longiuscula, apice membranacea pubescens. Pedes breves, subcontractiles, antici leviter posteriores valde distantes : tibiis compressis, apicem versus paulo dilatatis : tarsis 4-(?)articulatis ; art. 1^{mo} magno, subtus in lobum elongatum pubescentem producto, duobus (vix tribus, ut mihi videtur) sequentibus minutis simplicibus, ultimo elongato unguiculis simplicibus munito.

Ab ev bene, et Ecoròs politus.

For an opportunity of carefully examining the oral organs of the curious little beetle from which the above generic diagnosis has been compiled, I am indebted to Mr. Westwood, who has succeeded most admirably in dissecting it, and has furnished me with an excellent drawing both of the entire insect and its various parts. The rather obscure structure, however, of some of its details, in conjunction with their small size, has rendered it difficult to pronounce positively on one or two of them. Thus, I am as much at a loss as Mr. Westwood is to determine whether the third articulation of its antennæ may not be composed of two joints closely soldered together, as also whether the club is in reality made up of two or three. Again, it is open to inquiry whether there may not be three minute joints in the feet (instead of two) between the large basal one and the terminal; for the highest powers of the microscope have been hitherto insufficient to convince either Mr. Westwood or myself of this for certain. Be these few points, however, settled (ultimately) as they may, there can be but little doubt, I think, that the insect is allied to Engis, and must be referred therefore to the Erotylidæ. Its general aspect, indeed, is strongly suggestive of Engis, whilst its upper and lower lips, mandibles, maxillæ, and sterna are extremely similar to (though not actually identical with) those of that genus; in the singular construction of its feet, however, and its very solid antennal club, it differs from Engis essentially, whilst in its habits, which appear to be Myrmccophilous, it offers another most remarkable peculiarity.

Euxestus Parkii.

E. rufo-castanea, nitidissima, glaberrima; antennis pedibusque paulo pallidioribus.

Long. corp. lin. $1-1\frac{1}{8}$.

E. oblong-elliptic, bright reddish chestnut, highly polished, totally free from pubescence, and appearing, except under a high magnifying power, almost impunctate; but when viewed beneath a powerful lens, the entire surface will be seen to be beset with small but remote punctures. *Prothorax* with the hinder margin slightly sinuated. *Limbs* a little paler than the rest of the surface, being reddish testaceous.

The discovery of this insect, which so curiously recalls at first sight the common *Olibrus liquidus*, is due to the indefatigable researches of Mr. M. Park, to whom I have great pleasure in dedicating the species. Three specimens of it, one of which he has presented to the British Museum (the second being in his own possession, and the third having been destroyed for dissection), were captured by him in an ant's nest, in Dr. Lister's garden, at Funchal.

Fam. Tenebrionidæ.

Genus ADELINA, Chevr. (ined.).

Corpus oblongum vel lineare, valde depressum : prothorace transverso-subquadrato; prosterno postice inter pedes anticos lobato: metasterno postice bifido; alis amplissimis, læte nebulosis: abdomine e segmentis 5 composito. Antennæ longiusculæ (capite prothoraceque conjunctim paulo longiores), ante oculos sub margine clypei insertæ, apicem versus moniliformes sed vix incrassatæ; art. 1^{mo} reliquis haud robustiore, 2^{do} brevi, 3^{tio} longiusculo, ultimo subgloboso. Labrum transversum, antice rotundatum pilosum. Mandibulæ validæ corneæ triangulares, in medio profunde fisso-sinuatæ, una membrana aucta necnon ad apicem bifida. Maxillæ bilobæ, lobis pubescentibus; interno parvo angusto brevi, ad apicem ipsum acutissime uncinato. Palpi clavati; maxillares art. 1mo parvo, 2do 3tioque majoribus crassioribus, ultimo magno crasso securiformi ; labiales art. 1^{mo} curvato, 2^{do} huic paulo breviore sed latiore, subpoculiformi extus leviter producto, ultimo multo longiore crassiore, subfusiformi ad apicem oblique truncato. Mentum transverso-quadratum, basi leviter angustatum, apice integrum submembranaceum et ibidem in medio (ut mihi videtur) lobo elongatissimo subcorneo (ad apicem acuto), inter palpos et forsan ligulæ connato, auctum. Ligula membranacea, antice dilatata rotundata ciliata. Pedes graciles, longiusculi : tibiis subtilissime pubescentibus, per marginem exteriorem obscurissime subcrenulatis, ad apicem internum breviter calcaratis : tarsis heteromeris; posterioribus (sed præsertim posticis) art. 1^{mo} longiusculo.

Although the present genus has been long recognized, I give

the above structural details of it in full, because I believe they have never yet been published. I need scarcely add, however, that they are drawn out entirely from the insect described below; consequently if it should happen that the A. farinaria is not strictly congeneric with the species which have been usually regarded as Adelina, it follows as a necessity (if indeed my conclusion is correct, that the group has not yet been characterized) that the latter will eventually require a new name. I would call attention to this, because, having lately had an opportunity of examining superficially several representatives of Adelina in the Collection of the British Museum, they appeared to me to offer sufficient external differences from the Madeiran insect to warrant a suspicion that a careful dissection of them might perhaps bring structural characters to light distinct from those from which the above diagnosis has been compiled. Nevertheless, since this is only a conjecture, and since it is the opinion of my friend Dr. Schaum of Berlin that the Madeiran beetle is truly an Adelina, I have not hesitated to regard it as such, and have drawn out my generic details from it accordingly.

Adelina farinaria, n. sp.

A. oblonga, rufo-picea, nitida, valde depressa; capite prothoraceque confertim leviter punctulatis, hoc transverso, postice foveolis duabus brevibus longitudinaliter impresso, per marginem posticum sinuato; elytris punctato-striatis, interstitiis subtilissime punctulatis.

Long. corp. lin. 3.

Variat (immatura) colore pallido-ferrugineo.

A. oblong and greatly depressed, shining and glabrous, and (when mature) of a bright rufo-piceous hue; when immature, pale ferruginous. *Head* and *prothorax* closely and rather finely punctulated: the *clypeus* of the former uneven, and a good deal thickened and elevated about its margin, especially over the insertion of the antennæ: the *latter* squarish-transverse, with the sides a little rounded, and impressed behind with two very short and rather obscure longitudinal foveæ; the portion between these foveæ a little lobed (or produced backwards in front of the scutellum), causing the posterior margin to be slightly sinuated. *Elytra* rather lightly punctate-striated, and with the interstices most minutely and somewhat sparingly punctulated. *Limbs* usually concolorous with the rest of the surface,

As already implied in my observations under *Rhyzopertha* bifoveolata, the present insect can only be admitted into the Madeiran Catalogue as an *imported* one. Nevertheless it falls into the same category with many others (such as *Cerandria*,

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Tribolium, Tenebrio, Alphitobius, Trogosita, &c.) which have become gradually naturalized through the direct agency of commerce, and it cannot therefore be properly ignored. As above stated, several specimens of it were captured by Mr. M. Park in a cask of bad flour (he believes American) which had remained for more than a year in the Custom-House at Funchal.

Fam. Anthicidæ.

Genus OCHTHENOMUS, Schmidt.

Ochthenomus punctatus.

Ochthenomus punctatus, Dej. Cat. des Col. 239 (1837). _____, Laferté, Mon. des Anth. 283 (1848). _____, Lucas, Col. de l'Algérie, 380 (1849).

A single specimen of this insect was captured by Mr. M. Park beneath a stone, in the Ribeira de Sta Luzia, near Funchal. Since it belongs to a genus new to the Madeiran fauna, it may be as well to state that the Ochthenomi are insects of Mediterranean latitudes, and apparently but few in number. They may be known from the true Anthici by the very peculiar structure of their upper surface, which is coriaceous and opake, and is densely beset with excessively short and stiff silvery hairs, which have the appearance of very minute scales. Their limbs are elongated and slender; their head oblong and more or less rectangular, being generally a little wider than (and about as long as) the prothorax, from which it is detached by a very evident and narrow neck; and their eyes are smaller and less prominent, and the penultimate joint of their maxillary palpi is rather longer and less transverse, than is the case in Anthicus proper. The O. punctatus is recorded as occurring in Spain, the south of France, Sardinia, and Algeria; and I have taken a closely allied species in the island of Palma of the Canaries.

Such are the ten additions which I have been enabled, principally through the successful researches of Mr. M. Park (to whom the discovery of no less than seven of them are due), to make to the Madeiran Colcoptera during the past year. In January last I had to record (vide 'Annals,' ser. ii. vol. xx. pp. 504, 505) three species which were not included in my then recently published Catalogue, which raised the entire number (from 580) to 583. Even that, however, is now still further increased,—the species which have been observed in the Madeiras up to the present date (*i. e.* October 1858) amounting to 593.